REMARKS

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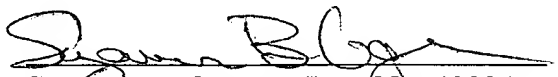
Respectfully submitted,

PEARNE & GORDON LLP

By: 
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MARKED-UP VERSION SHOWING CHANGES MADE

IN THE CLAIMS:

Claims 1-9 and 11-20 have been amended in the following manner:

1. (Amended) [Method] A method for determining a threshold value (O_{max}, O_{min}, O_{TR}) serving to limit [the] an output signal of a processing unit into which an input signal has been fed, characterized in that [the] a level of the input signal is determined and that the threshold value (O_{max}, O_{min}, O_{TR}) is set as a function of [that] the level of the input signal.

2. (Amended) [Method] The method as in claim 1, [characterized in that] wherein from the said level a mean level (I) is derived on the basis of which the threshold value (O_{max}, O_{min}, O_{TR}) is set[, with preferably only ambient noise contained in the input signal being factored in].

3. (Amended) [Method] The method as in claim 2, [characterized in that] wherein the threshold value (O_{TR}) is set by a differential amount (TR_{max}) above the mean level (I) of the input signal[, said differential amount (TR_{max}) preferably being equal to twenty decibels].

4. (Amended) [Method] The method as in claim 2, [characterized in that] wherein the mean level (I) is derived from the input signal s(t) along the following formula:

$$I = \frac{1}{T} \times \int_{o}^{T} |s(t)| \times dt$$

whereby an averaging function is performed over a time interval T [having a duration of preferably five seconds].

5. (Amended) [Method] The method as in [one of the claims 1 to 4, characterized in that] claim 1, wherein a maximum threshold value (O_{max}) is established.

6. (Amended) [Method] The method as in claim 5, [characterized in that] wherein the maximum threshold value (O_{max}) is so selected as to be equal to an upper comfort level of a hearing-impaired person.

7. (Amended) [Method] The method as in [one of the claims 1 to 6, characterized in that] claim 1, wherein a minimum threshold value (O_{min}) is established.

8. (Amended) [Method] The method as in claim 7, characterized in that the minimum threshold value (O_{min}) is so selected as to be equal to an output level that results from an input level of [preferably] about 80 dB and the corresponding amplification at that input level that is produced for a hearing-impaired person.

9. (Amended) [Method] The method as in [one of the claims 2 to 8, characterized in that] claim 3, wherein the differential amount (TRmax) is adjusted along a

compression ratio for a hearing-impaired person.

11. (Amended) Application of the method per [one of the claims 6, 8 or 9] claim 6 for operation of a hearing aid by a hearing-impaired person.

12. (Amended) [System] A system for implementing the method per [one of the claims 1 to 9] claim 1, characterized in that a processing unit is provided which receives an input signal and which permits within the processing unit the determination of a threshold value (O_{max}, O_{min}, O_{TR}) for the purpose of limiting the output signal, said threshold value (O_{max}, O_{min}, O_{TR}) being adjustable as a function of the level of the input signal.

13. (Amended) [System] The system as in claim 12, [characterized in that] wherein from the level of the input signal a mean level (I) can be determined by averaging[, preferably derived only from the ambient noise contained in the input signal].

14. (Amended) [System] The system as in claim [12 or] 13, [characterized in that] wherein the threshold value (O_{TR}) can be adjusted to a point which by a differential amount (TR_{max}) is above the mean level (I) of the input signal[, said differential amount (TR_{max}) preferably being equal to twenty decibels].

15. (Amended) [System] The system as in claim 14, [characterized in that] wherein the mean level (I) can be derived from the input signal s(t) by employing the following formula:

$$I = \frac{I}{T} \times {}_{o}\int^{T} |s(t)| \times dt$$

where an averaging function can be performed over a time interval T [with a duration of preferably five seconds].

16. (Amended) [System] The system as in [one of the claims 12 to 15, characterized in that] claim 12, wherein it permits a maximum threshold value (O_{max}) to be established.

17. (Amended) [System] The system as in claim 16, [characterized in that] wherein the maximum threshold value (O_{max}) can be selected to be equal to [the] an upper comfort level of a hearing-impaired person.

18. (Amended) [System] The system as in [one of the claims 12 to 17, characterized in that] claim 12, wherein it permits a minimum threshold value (O_{min}) to be established.

19. (Amended) [System] The system as in claim 18, [characterized in that] wherein the minimum threshold value (O_{min}) can be selected to be equal to the mean amplification value for a hearing-impaired person.

20. (Amended) [System] The system as in [one of the claims 13 to 19, characterized in that] claim 13, wherein the differential amount (TR_{max}) can be adjusted corresponding to [the] a compression ratio for a hearing-impaired person.

IN THE ABSTRACT:

The abstract has been amended in the following manner:

[Here described are a] A method and a system for defining a threshold value (O_{max}, O_{min}, O_{TR}) serving to limit the output signal or a processing unit which is fed an input signal. [According to the invention, an] An input-signal level is determined and the threshold value (O_{max}, O_{min}, O_{TR}) is set as a function of that input-signal level. By virtue of the fact that the threshold value is set as a function of the input-signal level, i.e. in adaptive fashion, it is also possible to limit transient noise whose level is well below the maximum value of the threshold value. As a result, when the method or system [per this invention] is applied in a hearing aid, the hearing comfort of the wearer of the hearing aid can be significantly enhanced.